| Notice of Allowability | Application No. | Applicant(s) |
|---|--|------------------------------|
| | 10/801,023 | OPSAL ET AL. |
| | Examiner | Art Unit |
| | Manuel L. Barbee | 2857 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to papers filed 23 February 2006. | | |
| | | |
| 2. The allowed claim(s) is/are <u>36-45</u> . | | |
| 3. Acknowledgment is made of a claim for foreign priority unal All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents | been received. been received in Application No | |
| International Bureau (PCT Rule 17.2(a)). | | |
| * Certified copies not received: | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. | | |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date | | |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
| | | |
| Attachment(s) | E Maine of Information () | latent Application (DTO 450) |
| 1. Notice of References Cited (PTO-892) | | ratent Application (PTO-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. ☐ Interview Summary Paper No./Mail Da | te |
| Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date <u>2/23/06</u> | 08), 7. ☐ Examiner's Amendr | ment/Comment |
| 4. ☐ Examiner's Comment Regarding Requirement for Deposit | 8. 🛛 Examiner's Stateme | ent of Reasons for Allowance |
| of Biological Material | 9. [] Other | |
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| | | |
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DETAILED ACTION

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1. Claims **3**6-45 are allowed.

2. The following is an examiner's statement of reasons for allowance: Engelhard et al. do not teach a method of measuring feature parameters on a wafer in a microelectronic fabrication process that includes taking a first optical metrology measurement, determining first parameters for the feature location from the first optical metrology measurements, said determining step including comparing the measurements to theoretical optical results calculated from a first theoretical model of the wafer using a first set of theoretical parameters, taking a second optical metrology measurement at the same feature location after a subsequent step in the fabrication process and determining second parameters for the feature location from the second optical metrology measurement, said determining step including comparing the measurement to theoretical optical results calculated from a second theoretical model of the wafer using a second set of theoretical parameters in combination with at least one of the previously determined first parameters used as a fixed parameter thereby reducing the number of fitting parameters needed to determine the second parameters.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 571-272-2212. The examiner can normally be reached on Monday-Friday from 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mlb March 17, 2006

> CAROL S.W. TSAI PRIMARY EXAMINER

al. J.W.Z

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